REQUEST **FOR**

◆□CONTINUED EXAMINATION (RCE) TRANSMITTAL

Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000. provides for continued examination of an utility or plant application filed on or after June 8, 1995.

Signature

Application Number	09/9 1 1.098
Filing Date	July 23, 2001
First Named Inventor	Kang-wook Park
Group Art Unit	2814
Examiner Name	Dana Farahani

5649-805DV Attorney Docket Number See The American Inventors Protection Act of 1999 (AIPA) This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application. NOTE: 37 C.F.R. § 1.114 is effective on May 29-2000. If the above identified application was filed prior to May 29. 2000. applicant may wish to consider filling a continued prosecution application (CPA) under 37 C.F.R. § 13.53(d) (PTO/SB/29) instead of an RCE to be eligible for the patent ferm adjustment projugons of the AIPA. See Changes to Application Examination and Provisional Application Fractice, Final Fule, 65 Fed Reg 30392 (Aug 16 200.) Interim Rult 65 Fed Reg 14865 (Mar 20, 2000), 1233 Off Gaz Pat Office 47 (Apr. 11 2000), which was est iblished FCE practice 1 Submission required under 37 C.F.R. § 1.114 a. Previously submitted i. [] Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on ______ (Any unentered amendment(s) referred to above will be entered). II. Consider the arguments in the Appeal Brief or Reply Brief previously filed on ni. Other b. [] Enclosed → I Amendment/Reply Affidavit(s)/Declaration(s) Information Disclosure Statement (IDS) Other 2. Miscellaneous a. Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months. Fee under 37 C F R § 1 17(i) required) b. Other The RCE fee under 37 C F.R. § 1.17(e) is required by 37 C F.R. § 1.114 when the RCE is filed Fees a.

The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. RCE fee required under 37 C.F.R. § 1.17(e) Extension of time fee (37 C.F.R § § 1.136 and 1.17) ııı ☐ Other b. Check in the amount of \$750.00 enclosed c. Payment by credit card (Form PTO-2038 enclosed) d. [7] If necessary, the Director is hereby authorized to charge any deficiencies, or credit any overpayments, to Deposit Account No. 50-0220 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED Grant 1. Scott 36,925 Registration No. (Attorney/Agent) Name (Print Type) April 24, 2003 Date Signature CERTIFICATE OF MAILING OR TRANSMISSION I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Confimissioner for Patents, Box RCE, Washington, DC 20231, or facsimile transmitted to the U.S. Patent and Trademark Office on: Name (Print Type) Candi L. Riggs April 24, 2003

Date

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Kang-Wook Park Serial No.: 09/911,098

Group Art Unit: 2814 Examiner: Dana Farahani

Filed: July 23, 2001

BIPOLAR JUNCTION TRANSISTORS HAVING TRENCH-BASED For:

BASE ELECTRODES

April 24, 2003

BOX RCE Commissioner for Patents Washington, DC 20231

AMENDMENT B

Sir:

Please enter this amendment prior to any further review of this application.

In the Claims:

Please amend the claims as follows:

1. (Amended) A bipolar junction transistor, comprising: an intrinsic collector region of first conductivity type in a semiconductor substrate;

a trench in said substrate, adjacent said intrinsic collector region;

a base electrode of second conductivity type in the semiconductor substrate, said base electrode comprising a trench-based electrode portion that extends in said trench and a lateral base electrode extension that extends outside said trench;

an extrinsic base region of second conductivity type that is self-aligned and electrically connected to said lateral base electrode extension and forms a P-N rectifying junction with said intrinsic collector region;

an intrinsic base region of second conductivity type that is self-aligned to said lateral base electrode extension, has a lower second conductivity type doping concentration therein relative to said extrinsic base region and forms a P-N rectifying junction with said intrinsic collector region;

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